



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NW

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,563	10/23/2001	Hsiao-Keng J. Chu	SUN-P6527-PIP	4836
22835	7590	08/22/2005	EXAMINER	
A. RICHARD PARK, REG. NO. 41241 PARK, VAUGHAN & FLEMING LLP 2820 FIFTH STREET DAVIS, CA 95616			TRAN, PHUC H	
		ART UNIT	PAPER NUMBER	2666

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/035,563	CHU, HSIAO-KENG J.
	Examiner	Art Unit
	PHUC H. TRAN	2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 January 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-30 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 9, 19, and 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- Regarding to claims, “InifiBand standard” is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-8, 10-18, and 20-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Finn et al. (U.S. Patent No. 5826032).

- With respect to claims 1, 11, and 21, Finn teaches method for bypassing use of a protocol checksum during communications across a reliable network link (e.g. the method using a computer for providing an embedded checksum in a packet of Finn), comprising:

configuring a communication system to bypass use of the checksum during communications across the reliable network link (e.g. Fig. 7A);

receiving an outbound packet to be transmitted to a destination across the reliable network link (block 81 in Fig. 9); and

sending the outbound packet to the destination across the reliable network link without computing the checksum for the outbound packet (Fig. 7A at block 24).

- With respect to claims 2, 12, and 22, Finn also teaches wherein configuring the communication system to bypass the checksum involves informing a protocol stack (e.g. Fig. 2) within the communication system that network interface hardware for the communication system is capable of computing the checksum, so that the protocol stack does not compute the checksum (Fig. 7B).

- With respect to claims 3, 13, and 23, Finn discloses whether the outbound packet is directed to a valid destination that is eligible for checksum bypassing (block 29 in Fig. 7B); if the outbound packet is not directed to a valid destination, computing the checksum for the outbound packet, and inserting the checksum into the outbound packet (block 22 in Fig. 7B).

- With respect to claims 4, 14, and 24, Finn teaches wherein the checksum is computed by a driver associated with network interface hardware for the communication system (e.g. at sibling computer).

- With respect to claims 5, 15, and 25, Finn teaches further comprising: receiving an inbound packet from a source across the reliable network link (block 31 in Fig. 7B); and accepting the inbound packet without re-computing the checksum (Fig. 11); wherein re-computation of the checksum is required by the communication protocol to verify that the inbound packet was received without errors (col. 11, lines 43-47).

- With respect to claims 6, 16, & 26, Finn also teaches wherein accepting the inbound packet without re-computing the checksum involves:

communicating a default checksum value to a protocol stack within the communication system (e.g. block 33 in Fig. 7B);

wherein the default checksum value matches the default checksum value contained within a checksum field of the inbound packet (e.g. validate at Fig. 7B);

whereby the protocol stack will match the default checksum value with the checksum field of the inbound packet and will consequently accept the inbound packet (block 29 in Fig. 7B).

- With respect to claims 7, 17, and 27, Finn teaches wherein accepting the inbound packet without re-computing the checksum additionally involves inserting the default checksum value into the checksum field of the inbound packet (block 22 in Fig. 7B).

- With respect to claims 8, 18, and 28, Finn discloses wherein the communication protocol includes one of:

Transmission Protocol (col. 5, line 23);

Internet Protocol (col. 5, line 23); and

User Datagram Protocol (col. 5, line 56).

- With respect to claims 10, 20, and 30, Finn also discloses wherein the checksum is a TCP checksum (e.g. Fig. 3); and wherein the protocol stack is an IP stack (Fig. 2).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Melzer et al. (U.S. Patent No. 5898713) discloses IP checksum offload.
- Aaker et al. (U.S. Patent No. 5815516) discloses method and apparatus for producing transmission control protocol checksums using Internet protocol fragmentation.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuc Tran
Assistant Examiner
Art Unit 2664

P.t
8/18/05



DANG TON
PRIMARY EXAMINER